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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
KAO, WEI PO ERIC	

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/795,974	YATA ET AL.	
	Examiner	Art Unit	
	Wei-po Kao	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/ are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejection - 35 USC § 112

2. Claims 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7 and 14, the phrase "such that" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejection - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekudden et al, U.S. Patent No 6163577 in view of Takeo, U.S. Patent No 6385183 and Kisor, U.S. Patent No 6782429.

Regarding Claim 1, Ekudden et al teach that **an electronic apparatus comprising: an encoder that encodes source data to generate transmission data; a wireless communication device that executes communication with an external device via a wireless network, and transmits the transmission data generated by the encoder to the external device** (see Abstract, Figures 4 and 5, Column 3 Line 9-67 i.e. figure 4 shows the communication between the base station and the mobile station through a wireless network and notice that the arrows in between indicate the communication is exchanging in between; figure 5 shows a transmitter, which is in both base station and mobile station to process the communication data in between, or execute the communication data to be sent); **means for determining a quality with which the source data is to be transmitted** (see Column 3 Line 9-30); **and means for controlling the encoder to vary**

an amount of the generated transmission data on the basis of the determined quality (see Figure 5-7, Column 3 Line 31-57). However, Ekudden et al do not teach that **the apparatus, wherein comprising means for detecting a number of devices connected to the wireless communication device via the wireless network; means for determining a quality with which the source data is to be transmitted on the basis of the detected number of devices.** Takeo from the same field of endeavor teaches that **the apparatus, wherein comprising means for detecting a number of devices connected to the wireless communication device via the wireless network; means for determining a quality with which the source data is to be transmitted on the basis of the detected number of devices** (see Abstract, Column 1 Line 45-50 56-62 i.e. from column 1 line 45-50 and 56-62 Takeo disclose a power control system to adjust the power level, thus a quality, with which the signals are sent from base stations to their managed mobile stations according to whether or not the number of the managed mobile stations is in or out of an allowable range). At the time of the invention, it would have been obvious to a person ordinary skill in the art to determine the quality related to transmitting a data base on the number of mobile devices connected to the determining device, base station. The rationale would have been that such quality help eliminate the factor of interference caused by group of mobile devices.

Still regarding to Claim 1, Ekudden et al and Takeo teach all the limitations in claim 1 except that **the apparatus, wherein comprising means for determining a quality with which the source data is to be transmitted on the basis of a type of the source data.** Kisor from the same field of endeavor teaches that **the apparatus, wherein comprising means for**

determining a quality with which the source data is to be transmitted on the basis of a type of the source data (see Abstract). At the time of the invention, it would have been obvious to a person ordinary skill in the art to determine the quality related to transmitting a data based on the type of the data. The rationale would have been that it is desired to maintain the quality of service of various communication data through out the entire communication process; for example, if transmission of data relies on only one quality of service parameter, quality of service of different type of data such as voice and video will suffer.

Regarding Claim 2, Ekudden et al further teach that **the electronic apparatus, wherein the controlling means includes means for setting in the encoder a value of sampling frequency, which is to be used in the encoding of the source data, in accordance with the determined quality** (see Column 3 Line 31-35).

Regarding Claim 3, Ekudden et al further teach that **the electronic apparatus, wherein the controlling means includes means for setting in the encoder a kind of an encoding scheme, which is to be used in the encoding of the source data, in accordance with the determined quality** (see Abstract, Figure 6-10 e.g. the invention of Ekudden et al provides an encoding scheme for selecting source data to encode and transmit in accordance with determined quality of data).

Regarding Claim 4, Ekudden et al further teach that **the electronic apparatus, wherein the controlling means includes means for setting in the encoder a kind of an encoding scheme,**

which is to be used in the encoding of the source data, and a value of sampling frequency, which is to be used in the encoding of the source data, in accordance with the determined quality (claim 4 discloses no further limitation than claims 2 and 3, thus is rejected with the same reasoning as for claims 2 and 3 disclosed in the same sections in the paragraph).

Regarding Claims 8-11, theses are program claims corresponding to the apparatus claims 1-4 respectively, and therefore rejected under the same reason set forth in the same section of claims 1-4 in this paragraph.

7. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekudden et al, U.S. Patent No 6163577 in view of Takeo, U.S. Patent No 6385183 and Kisor, U.S. Patent No 6782429 as applied to claims 1 and 8 above, and further in view of Samaras et al U.S. Publication No 20040233903.

Regarding Claim 5, Ekudden et al, Takeo and Kisor teach all the limitations in claim 1 except that **the electronic apparatus, further comprising a plurality of input devices capable of inputting data, wherein the quality determining means includes means for detecting the type of the source data by determining from which of the input devices the source data is input.** Samaras et al from the same field of endeavor teach that **the electronic apparatus, further comprising a plurality of input devices capable of inputting data** (see Paragraph [0001] [0010] [0040] e.g. multiple users in the EDGE network refers to multiple cellular devices), **wherein the quality determining means includes means for detecting the type of**

the source data by determining from which of the input devices the source data is input (see Abstract, Figure 7, Paragraph [0001] [0110] e.g. to encode more than one packets from a same user into one packet requires picking out all the packets belonging to a same user as the same type of packet first). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the encoding scheme from Samaras et al in the encoding system and method of Ekudden et al. The rationale would have been that quality of transmission is improved due to those repetitive headers of packets belonging to a source can be reduced, which further reduce chance of errors occurring in transmission and increase the transmission throughput.

Regarding Claim 12, it is a program claim corresponding to the apparatus claim 5, and therefore rejected under the same reason set forth in the same section of claim 5 in this paragraph.

8. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekudden et al, U.S. Patent No 6163577 in view of Takeo, U.S. Patent No 6385183 and Kisor, U.S. Patent No 6782429 as applied to claims 1 and 8 above, and further in view of Lee U.S. Publication No 20040004973.

Regarding Claim 7, Ekudden et al, Takeo and Kisor teach that **the electronic apparatus, wherein the source data includes audio data** (see Ekudden et al, Figures 5 and 7, Column 3 Line 36-39 i.e. a speech data is an audio data); **means for determining whether a device that**

transmits image data is connected to the wireless communication device via the wireless network (in an wireless communication environment, before a wireless device is able to communicate with another device, establishment of communication between the two has to be acknowledged first, thus either one of the two knows whether or not the other device is connected via a wireless network; also note that the acknowledgement process can be done regardless whether a device transmits image data or not)**; the quality determining means includes means for determining, when the device that transmits image data is connected to the wireless communication device, the quality with which the source data is to be transmitted** (see Kisor, Abstract, Figures 2-3, Column 2 Line 22-26 42-45 57-59, Column 3, Column 4 Line 1-9 i.e. the scheduler determines the desire QoS for each type of data such as video and audio and the data is transmitted to the proper devices, which is connected to the scheduler; also note that a video is formed by frames of images) However, Ekudden et al, Takeo and Kisor do not teach that **such that transmission of the image data is executed with priority over transmission of the source data.** Lee from the same field of endeavor teaches that **such that transmission of the image data is executed with priority over transmission of the source data** (see [0016] [0027] [0036] Line 9-14 i.e. [0036] teaches that a video data, which contains frames of image and bears higher priority is transmitted prior to a voice data, which contains audio data and bears lower priority). At the time of the invention, it would have been obvious to a person ordinary skill in the art to assign higher priority to delay sensitive data such as video data and lower priority to less delay sensitive data such as voice. The rationale would have been that it is desired to provide smooth transmission of video with minimum delay to the end user in a real time application.

Regarding Claim 14, it is a program claim corresponding to the apparatus claim 7, and therefore rejected under the same reason set forth in the same section of claim 7 in this paragraph.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Referring to the PTO Form 892, references are cited to show similar method and system to process different types of data.

10. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei-po Kao whose telephone number is (571)270-3128. The examiner can normally be reached on Monday through Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W.K.

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER